

AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows:

1. (Canceled)

2. (Currently amended) A light-transmitting module, comprising:

 a stack of a metallic block, an insulating heat sink mounted on said metallic block and an electrically conductive layer formed on said insulating heat sink, said stack forming a parallel-plate capacitor with capacitance; and

 a laser diode having an anode and a cathode, said laser diode being mounted on said conductive layer such that said anode faces and is in contact with said conductive layer,
 wherein a capacitance of said parallel-plate capacitor is at least 50 pF, and
 wherein said heat sink includes a groove for securing an optical fiber.

3. (Previously presented) The light-transmitting module according to claim 2,

 wherein said laser diode includes an n-type substrate and a plurality of epitaxial layers of an n-type cladding layer, an active layer, and a p-type cladding layer grown on said n-type substrate, said p-type cladding layer corresponding to said anode and said n-type substrate corresponding to said cathode, said laser diode being mounted on said conductive layer such that said plurality of epitaxial layers faces and is in contact with said conductive layer.

4. (Previously presented) The light-transmitting module according to claim 2,

 wherein said laser diode includes a p-type substrate and a plurality of epitaxial layers of a p-type cladding layer, an active layer, and an n-type cladding layer grown on said p-type substrate, said n-type cladding layer corresponding to said cathode and said p-type substrate corresponding to said anode, said laser diode being mounted on said conductive layer such that said p-type substrate faces and is in contact with said conductive layer.

5. (Previously presented) The light-transmitting module according to claim 2,
further comprising a driver for driving said laser diode, said driver being mounted on said
metallic block.

6-7. (Canceled)

8. (Currently amended) The light-transmitting module according to ~~claim 7~~ claim 15,
wherein said laser diode includes an n-type substrate and a plurality of epitaxial layers of
an n-type cladding layer, an active layer, and a p-type cladding layer grown on said n-type
substrate, said p-type cladding layer corresponding to said anode and said n-type substrate
corresponding to said cathode, said laser diode being mounted on said conductive layer such that
said epitaxial layers face and are in contact with said conductive layer.

9. (Currently amended) The light-transmitting module according to ~~claim 7~~ claim 15,
wherein said laser diode includes a p-type substrate and a plurality of epitaxial layers of a
p-type cladding layer, an active layer, and an n-type cladding layer grown on said p-type
substrate, said n-type cladding layer corresponding to said cathode and said p-type substrate
corresponding to said anode, said laser diode being mounted on said conductive layer such that
said p-type substrate faces and is in contact with said conductive layer.

10. (Currently amended) The light-transmitting module according to ~~claim 7~~ claim 15,
wherein said heat sink is made of copper tungsten.

11. (Currently amended) The light-transmitting module according to ~~claim 7~~ claim 15,
wherein said heat sink is made of silicon.

12. (Currently amended) The light-transmitting module according to ~~claim 7~~ claim 15,
wherein said insulating layer is made of material selected from a group of silicon oxide,
silicon nitride, or silicon oxi-nitride.

13. (Currently amended) The light-transmitting module according to ~~claim 7~~ claim 15,
further comprising an electrically conductive and grounded block, said heat sink being
mounted on said conductive block.

14. (Currently amended) The light-transmitting module according to ~~claim 13~~ claim 15,
further comprising a driver for driving said laser diode, said driver being mounted on said
conductive block.

15. (Currently amended) ~~The light-transmitting module according to claim 7~~ A light-transmitting
module, comprising:

a stack of an electrically conductive heat sink, an insulating layer provided on said heat
sink and an electrically conductive layer, said stack forming a parallel-plate capacitor with
capacitance; and

a laser diode having an anode and a cathode, said laser diode being mounted on said
conductive layer such that said anode faces and is in contact with said conductive layer, and
wherein a capacitance of said parallel-plate capacitor is at least 50 pF, and
wherein said heat sink further includes a groove for securing an optical fiber.

16. (Original) The light-transmitting module according to claim 15,
wherein said heat sink further includes another groove for securing a ferrule, said optical
fiber being secured by said ferrule.

17. (Previously presented) The light-transmitting module according to claim 13,
further comprising a driver for driving said laser diode, said driver being mounted on said
heat sink.